UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 7,018,050 B2 Page 1 of 2

APPLICATION NO.: 10/657527 DATED: March 28, 2006

INVENTOR(S) : Robert Alan Ulichney et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On Title Page, Item (57), under "ABSTRACT", in column 2, line 7, delete "attends" and insert -- subtends --, therefor.

In column 3, line 58, after "type of" delete "is".

$$\begin{bmatrix} x_c w \\ y_c w \\ w \end{bmatrix} = \begin{bmatrix} h_1 & h_2 & h_3 \\ h_4 & h_5 & h_6 \\ h_7 & h_8 & h_9 \end{bmatrix} \begin{bmatrix} x_p \\ y_p \\ 1 \end{bmatrix}$$

In column 6, lines 1-7, delete "

" and insert

(11)

$$\begin{bmatrix} x_{p1} & y_{p1} & 1 & 0 & 0 & 0 & -x_{p1}x_{c1} & -y_{p1}x_{c1} & -x_{c1} \\ 0 & 0 & 0 & x_{c1} & y_{c1} & 1 & -x_{p1}y_{c1} & -y_{p1}y_{c1} & -y_{c1} \\ x_{p2} & y_{p2} & 1 & 0 & 0 & 0 & -x_{p2}x_{c2} & -y_{p2}x_{c2} & -x_{c2} \\ 0 & 0 & 0 & x_{c2} & y_{c2} & 1 & -x_{p2}y_{c2} & -y_{p2}y_{c2} & -y_{c2} \\ x_{p3} & y_{p3} & 1 & 0 & 0 & 0 & -x_{p3}x_{c3} & -y_{p3}x_{c3} & -x_{c3} \\ 0 & 0 & 0 & x_{c3} & y_{c3} & 1 & -x_{p3}y_{c3} & -y_{p3}y_{c3} & -y_{c3} \\ x_{p4} & y_{p4} & 1 & 0 & 0 & 0 & -x_{p4}x_{c4} & -y_{p4}x_{c4} & -x_{c4} \\ 0 & 0 & 0 & x_{c4} & y_{c4} & 1 & -x_{p4}y_{c4} & -y_{p4}y_{c4} & -y_{c4} \\ \end{bmatrix} \begin{bmatrix} 0 \\ h_2 \\ h_3 \\ h_4 \\ h_5 \\ h_6 \\ h_7 \\ h_8 \\ h_9 \end{bmatrix}$$

.- L°

--, therefor.

$$\begin{bmatrix} x_{\rho 1} & y_{\rho 1} & 1 & 0 & 0 & 0 & -x_{\rho 1}x_{c1} & -y_{\rho 1}x_{c1} & -x_{c1} \\ 0 & 0 & 0 & x_{c1} & y_{c1} & 1 & -x_{\rho 1}y_{c1} & -y_{\rho 1}y_{c1} & -y_{c1} \\ x_{\rho 2} & y_{\rho 2} & 1 & 0 & 0 & 0 & -x_{\rho 2}x_{c2} & -y_{\rho 2}x_{c2} & -x_{c2} \\ 0 & 0 & 0 & x_{c2} & y_{c2} & 1 & -x_{\rho 2}y_{c2} & -y_{\rho 2}y_{c2} & -y_{c2} \\ x_{\rho 3} & y_{\rho 3} & 1 & 0 & 0 & 0 & -x_{\rho 3}x_{c3} & -y_{\rho 3}x_{c3} & -x_{c3} \\ 0 & 0 & 0 & x_{c3} & y_{c3} & 1 & -x_{\rho 3}y_{c3} & -y_{\rho 3}y_{c3} & -y_{c3} \\ x_{\rho 4} & y_{\rho 4} & 1 & 0 & 0 & 0 & -x_{\rho 4}x_{c4} & -y_{\rho 4}x_{c4} & -x_{c4} \\ 0 & 0 & 0 & x_{c4} & y_{c4} & 1 & -x_{\rho 4}y_{c4} & -y_{\rho 4}y_{c4} & -y_{c4} \end{bmatrix} \begin{bmatrix} h_1 \\ h_2 \\ h_3 \\ h_4 \\ h_5 \\ h_6 \end{bmatrix}$$

In column 6, lines 24-35, delete "

(11)

$$\begin{bmatrix} x_c w \\ y_c w \\ w \end{bmatrix} = \begin{bmatrix} h_1 & h_2 & h_3 \\ h_4 & h_5 & h_6 \\ h_7 & h_8 & h_9 \end{bmatrix} \begin{bmatrix} x_p \\ y_p \\ 1 \end{bmatrix}$$

--, therefor.

In column 14, line 4, in Claim 3, delete "far" and insert -- for --, therefor.

In column 14, line 8, in Claim 4, delete "stop" and insert -- step --, therefor.

In column 14, line 50, in Claim 7, delete "or ray" and insert -- array --, therefor.

Signed and Sealed this

Sixteenth Day of March, 2010

David J. Kappos

Director of the United States Patent and Trademark Office